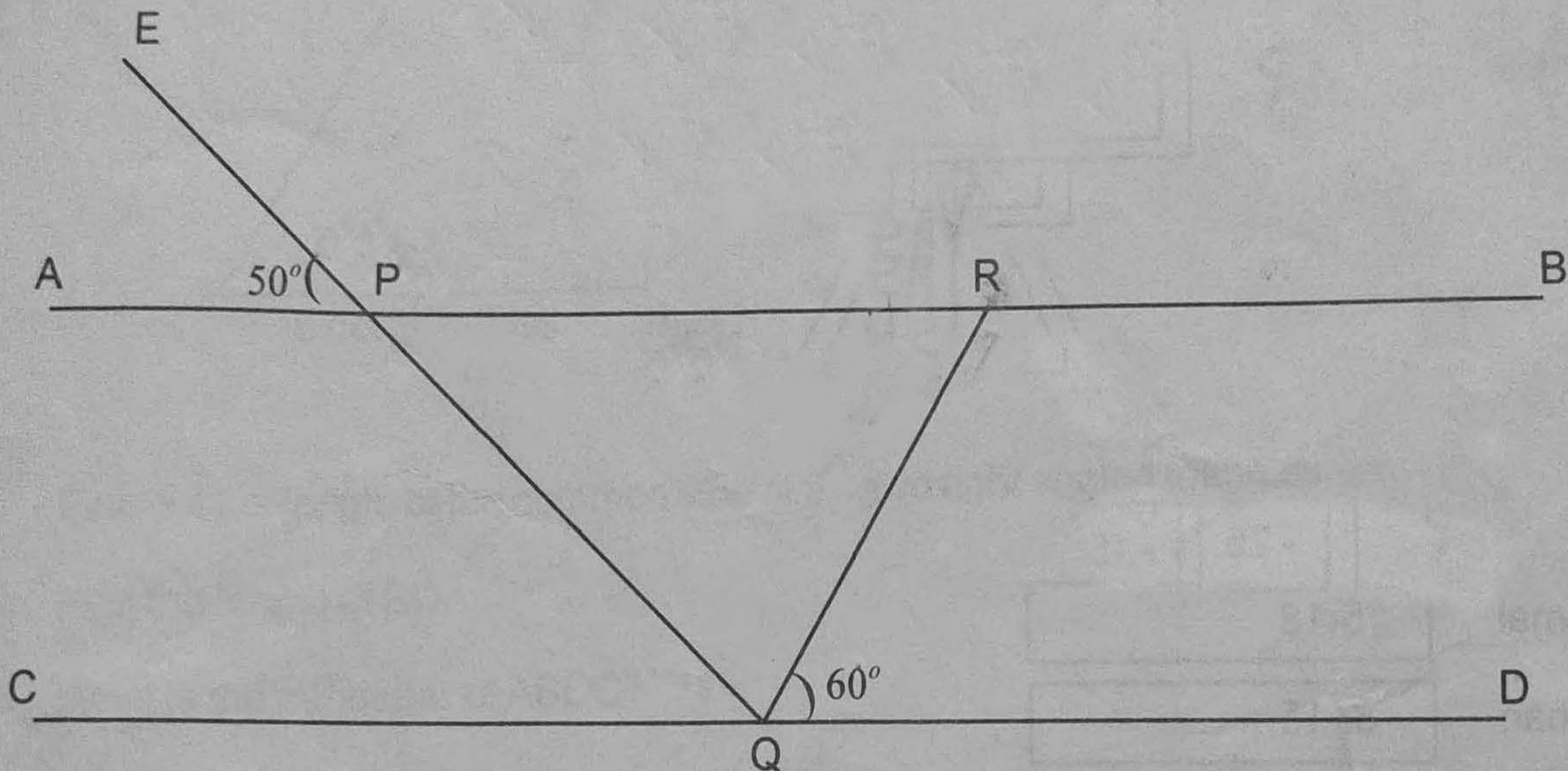


Class: 7

Time : 2 hours

- 15 minutes is given as cool-off time.
- Read the questions carefully during this time.
- Attempt **ANY SIX** activities from Activity ONE to Activity EIGHT.

Activity 1 - Parallel Lines

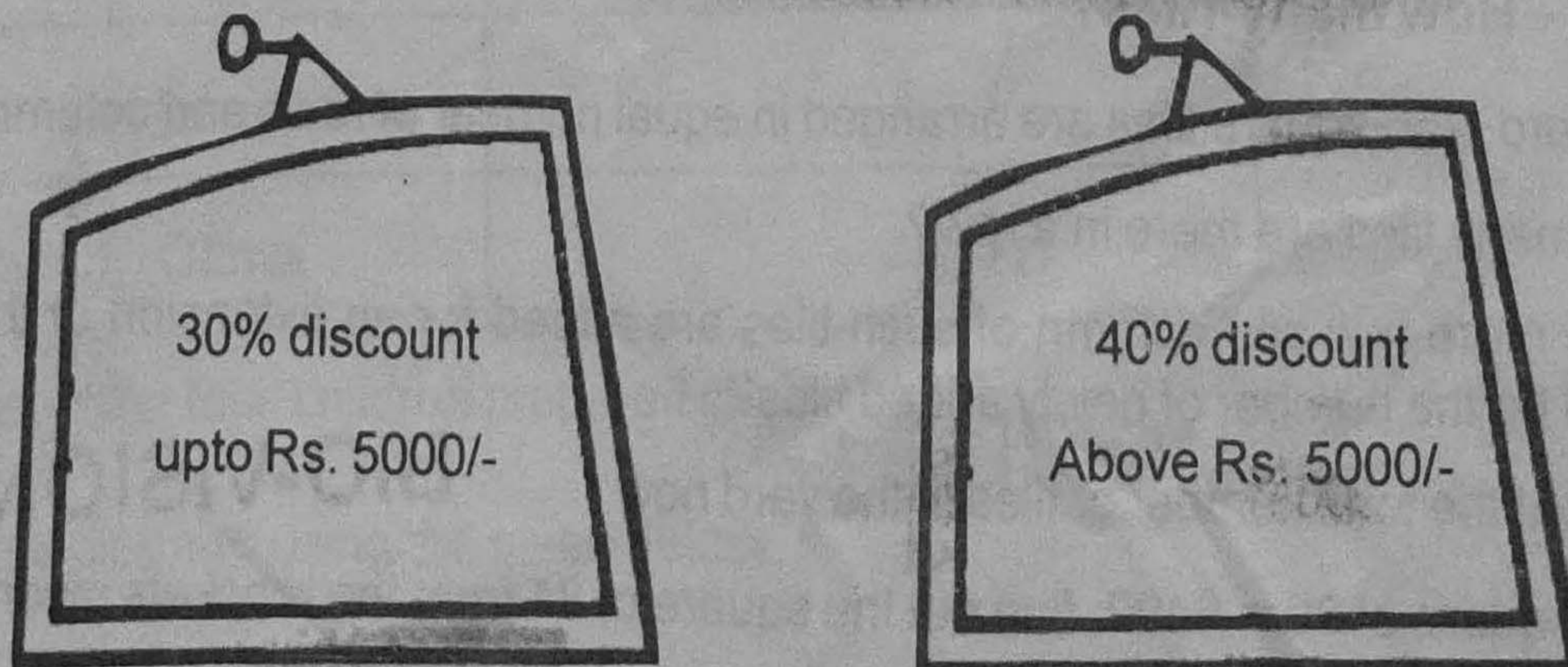


In the figure, AB and CD are parallel lines.

- a) Find an angle which is a linear pair with angle $\angle APE$.
- b) If $\angle APE = 50^\circ$ and $\angle RQD = 60^\circ$, then find the measures of $\angle RPQ$ and $\angle ARQ$.
- c) In triangle PQR, find the measure of $\angle Q$.

Activity 2 - Let's Read and Grow

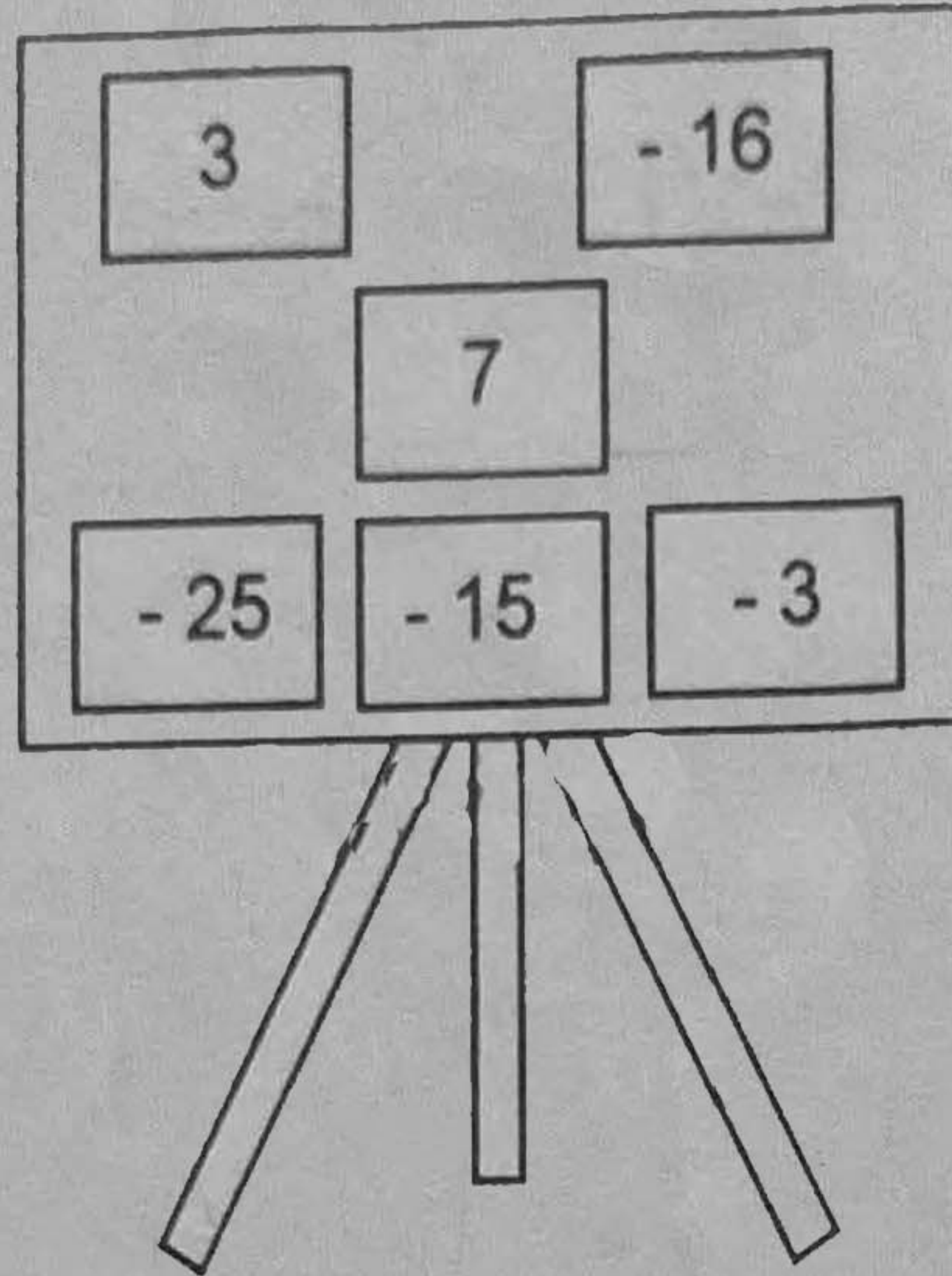
Gopu and Babu visited a Book Fair. Look at the advertisement they saw there.



- a) Gopu bought books for Rs.5200 and Babu bought for Rs.4500. How much money should each of them pay?
- b) If they bought books together, then how much amount would they have to pay?

Activity 3 - Card Game

In a Maths Class, the teacher distributed some cards to the children as part of a game. Look at the number cards and find out the answers from the board.



- a) Amal

15-18

- b) Shan

-8+15

- c) Joyal

-5-20

- d) Silna

-23+7

- e) Arrange the answers in ascending order.

Activity 4 - Let's Construct a Triangle

- a) Draw a triangle ABC with measures $AB = 7$ centimetres, $\angle A = 70^\circ$, $\angle B = 60^\circ$
- b) Find the measure of $\angle C$.

Activity 5 - How many Tiles?

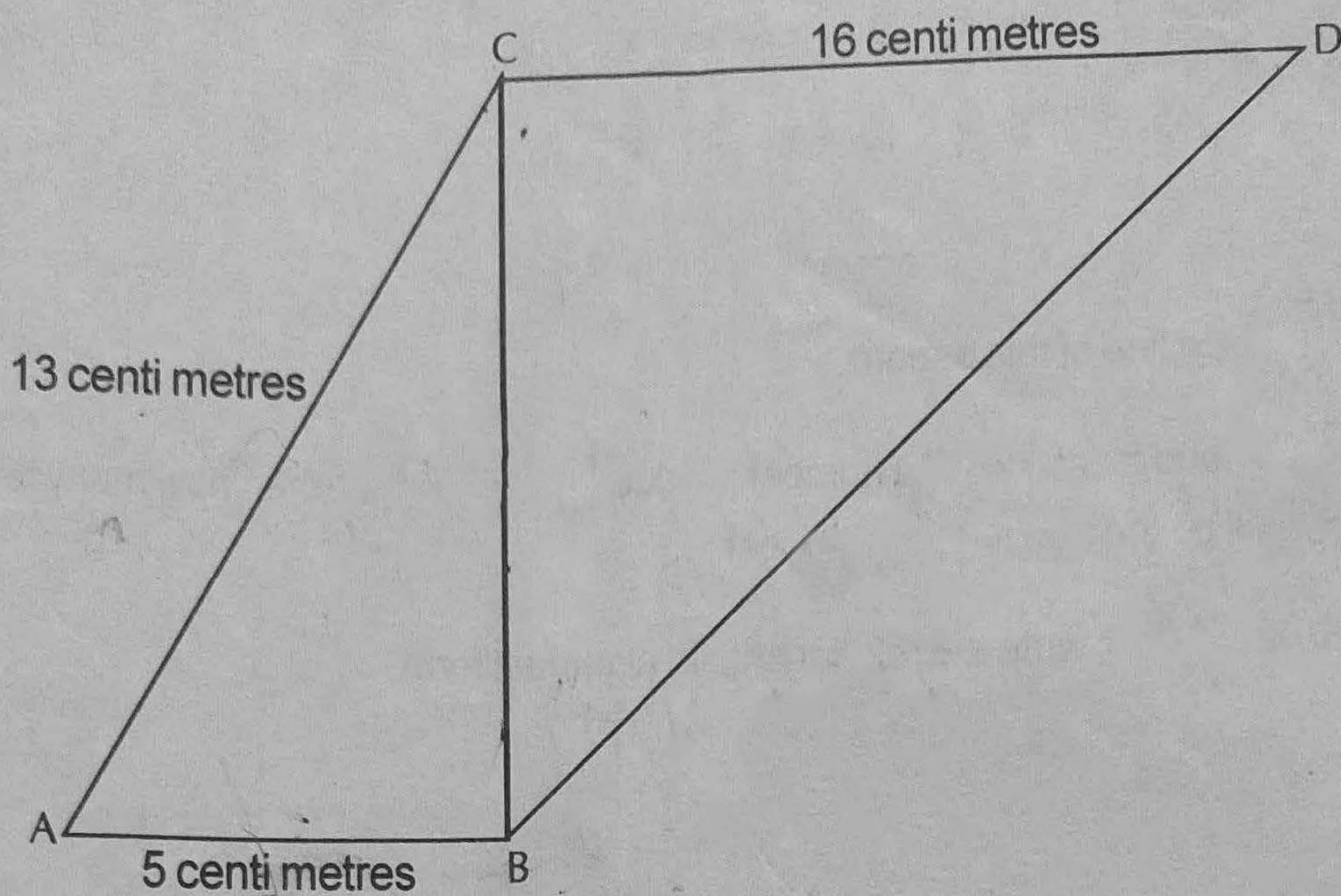
In a yard, 256 square tiles are arranged in equal number of rows and columns.

- a) How many tiles are there in a row?
- b) If one more row and column of such tiles are added for an extension of the yard, what would be the number of newly added tiles?
- c) Find out the total number of tiles in the yard now.
- d) If the square of 80 is 6400, find out the square of 81 from the brackets given below.

[a. $6400+81$, b. $6400+80$, c. $6400+79+80$, d. $6400+80+81$]

Activity 6 - Right Angled Triangles

In the figure given below, two right angled triangles are placed together.



- Find out the length of the common side of the two right angled triangles.
- Find the length of BD .
- What is the perimeter of $ABDC$?

Activity 7 - Happy Drinks

Children prepared natural drinks as part of Happy Drinks programme. The number of children who prepared each type of drink is given below.

Drinks	Percentage of children
Lemon	50
Honey	20
Tender coconut	5
Carrot	25

- What part of the total children prepared carrot drink?
- Draw a pie diagram using the given details.

Activity 8 - Let's Find the Relation

$$3 + 6 + 12 = 21$$

$$4 + 8 + 16 = 28$$

$$5 + 10 + 20 = 35$$

$$\dots + \dots + \dots = \dots$$

- Write the next line of this pattern.
- If two times and four times of a number is added to the number, then how many times of the number will be the answer?
- If 'n' is the number, write the relationship in algebraic form.